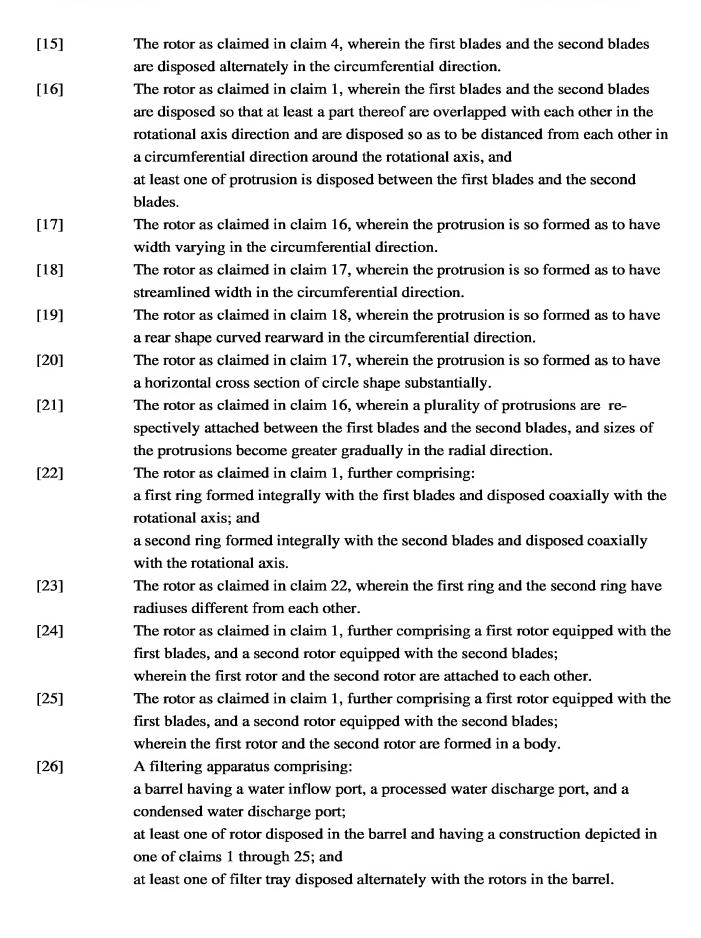
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Claims

[1]	A rotor for generating vortex water flow, comprising:
	a plurality of first blades extended in a radial direction from a rotational axis thereof; and
	a plurality of second blades extended in the radial direction from the rotational
	axis, and disposed at positions different from positions of the first blades in a direction of the rotational axis.
[2]	The rotor as claimed in claim 1, wherein the first blades and the second blades
	have widths different from each other in a circumferential direction around the rotational axis.
[3]	The rotor as claimed in claim 2, wherein the first blades and the second blades
	are so disposed as to be overlapped with each other.
[4]	The rotor as claimed in claim 1, wherein the first blades and the second blades
	are disposed at positions different from each other in a circumferential direction
	around the rotational axis.
[5]	The rotor as claimed in claim 4, wherein the first blades and the second blades
	are partially overlapped with each other.
[6]	The rotor as claimed in claim 4, wherein the first blades and the second blades
	are distanced from each other in the circumferential direction.
[7]	The rotor as claimed in claim 6, wherein the first blades and the second blades
	are so disposed as to be distanced equally from each other in the circumferential direction.
[8]	The rotor as claimed in claim 4, further comprising at least one of protrusion
	attached on outer surfaces of the first blades and/or second blades.
[9]	The rotor as claimed in claim 8, wherein the protrusion is so formed as to have
	width varying in the circumferential direction.
[10]	The rotor as claimed in claim 9, wherein the protrusion is so formed as to have
	streamlined width in the circumferential direction.
[11]	The rotor as claimed in claim 10, wherein the protrusion is so formed as to have
	a rear shape curved rearward in the circumferential direction.
[12]	The rotor as claimed in claim 9, wherein the protrusion is so formed as to have a
	horizontal cross section of circle shape substantially.
[13]	The rotor as claimed in claim 7, wherein a plurality of protrusions are re-
	spectively attached between the first blades and the second blades, and sizes of
	the protrusions become greater gradually in the radial direction.
[14]	The rotor as claimed in claim 4, wherein the first blades and the second blades
	have widths same with each other in the circumferential direction.

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[27] The filtering apparatus as claimed in claim 26, wherein the filter tray is fixed in the barrel.
[28] The filtering apparatus as claimed in claim 26, wherein the filter tray has at least one of water passage port so formed as to penetrate a plane thereof.
[29] The filtering apparatus as claimed in claim 28, wherein the filter tray includes a supporting plate having a disk shape, a drain cloth attached on both surface of the supporting plate, and a separation membrane attached to an outer surface of the drain cloth.
[30] The filtering apparatus as claimed in claim 29, wherein the drain cloth and the separation membrane are adhered onto the supporting plate with thermosetting adhesive.